Amendments to the Claims

This listing of claims will replace all prior version, listings, of claims in the specification:

Listing of Claims:

- 1. (original) An oligonucleotide array comprising a surface and a plurality of oligonucleotides, wherein at least one oligonucleotide has at least one modified sugar moiety.
- 2. (original) An oligonucleotide array according to claim 1, wherein the 2'-OH group of the sugar moiety is substituted.
- 3. (original) An oligonucleotide array according to claim 2, wherein the sugar moiety comprises at the 2'- position: F; O-, S-, or N-alkyl; O-, S-, or N-alkenyl; O-, S- or N-alkynyl; or O-alkyl-O-alkyl, wherein the alkyl, alkenyl and alkynyl may be substituted or unsubstituted C₁ to C₁₀ alkyl or C₂ to C₁₀ alkenyl and alkynyl, alkoxyalkyl, C₁ to C₁₀ lower alkyl, substituted C₁ to C₁₀ lower alkyl, alkaryl, aralkyl, O-alkaryl or O-aralkyl, SH, SCH₃, Cl, Br, CN, CF₃, OCF₃, SOCH₃, SO₂ CH₃, ONO₂, NO₂, N₃, NH₂, heterocycloalkyl, heterocycloalkaryl, aminoalkylamino, polyalkylamino.
- 4. (original) An oligonucleotide array according to any of the previous claims wherein the sugar moiety comprises a 2'-MOE, 2'-DMAOE, 2'-methoxy or 2'-aminopropoxy.
- 5. (original) An oligonucleotide array according to any of the previous claims, wherein said oligonucleotides have a length of about 15 to 50 nucleotides.
- 6. (original) An oligonucleotide array according to any of the previous claims, wherein said oligonucleotides comprise at least 10 modified sugar moieties.
- 7. (original) An oligonucleotide array according to any of the previous claims, wherein said oligonucleotide array comprise at least 50% oligonucleotides with modified sugar moieties.
- 8. (original) An oligonucleotide array according to any of the previous claims wherein said oligonucleotide array comprises oligonucleotides which specifically hybridize to short mammalian RNAs.
- 9. (original) The oligonucleotide array of claim 8, wherein said oligonucleotides specifically hybridize to short human RNAs.

- 10. (original) An oligonucleotide array according to any of the previous claims wherein said oligonucleotide array is comprehensive for the detection of small RNAs of a given organ, tissue or cell of an organism.
- 11. (original) An oligonucleotide array according to any of the previous claims, wherein said oligonucleotides are noncovalently attached to the surface.
- 12. (original) An oligonucleotide array according to any of the previous claims, wherein said oligonucleotide array comprises oligonucleotides with one or more deoxyribonucleotides.
- 13. (original) An oligonucleotide array according to any of the previous claims, wherein the oligonucleotide array can be used on an evanescent wave sensor platform.
- 14. (currently amended) A method for the detection of short RNAs comprising the steps of (a) providing a biological sample, wherein said sample comprises short RNAs; (b) contacting said sample with an oligonucleotide array according to any of claims 1 to 13 claim 1; (c) performing a hybridization reaction between the short endogenous RNAs and the oligonucleotides in the array.
- 15. (currently amended) A method to correlate a biological sample to a biological condition comprising (a) providing a biological sample, wherein said sample comprises short RNAs; (b) contacting said sample with an oligonucleotide array according to any of claims 1 to 13 claim 1, wherein said array comprises a set of predefined sequences suitable for the detection of short RNAs; (c) comparing the hybridization pattern obtained with a standard hybridization pattern.
- 16. (currently amended) A method according to claim 14 or 15 claim 14, wherein said short RNAs are micro RNAs (miRNAs).
- 17. (currently amended) A method according to claim 15 or 16 claim 15 wherein the biological sample is correlated to a health state.
- 18. (currently amended) A method for the prognosis or diagnosis of a diseases comprising (a) providing a biological sample, (b) contacting an oligonucleotide array according to any-of claims 1 to 13 claim 1 corresponding to a set of defined sequences useful for the detection of short RNAs, (c) obtaining a hybridization pattern, (d) comparing said hybridization pattern to a standard hybridization pattern, wherein the presence or absence of a certain pattern is indicative of a likelihood to develop a disease or of the presence of a disease.
- 19. (original) A method according to claim 18, wherein the biological sample is from a human.

20. (currently amended) A method according to claim 18 or 19 claim 18, wherein the disease is cancer, a neurodegenerative disease or an infectious disease.